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OPEDA

(ORGANIZED IN 1929)

Organization of Professional Employees of the U. S. Department of Agriculture

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Dr. Alan T. Waterman at the June Luncheon

In introducing the speaker of the day, Vice-President Morrison said: "We are very fortunate today, as you all realize, in having as our speaker Dr. Alan T. Waterman, Director of the National Science Foundation, a post he has held since April, 1951. Prior to that time he has held many responsible positions both in and out of government. For four years he was Deputy and Chief Scientist of Naval Research; at another time he was Chief of the Office of Field Service, Office of Scientific Research and Development." Mr. Morrison then presented a brief summary concerning Dr. Waterman's further background and experience and added, "I assume from this write-up that Dr. Waterman is a true scientist. He is going to tell us something today about the National Science Foundation and its activities. After he finishes, please feel free to ask any questions you may have and I believe he will be glad to answer them in so far as he can."

Dr. Waterman opened his remarks by saying that he appreciated very much this opportunity to speak about the Foundation and expressed his regret at having been unable to accept our prior invitation. He added that he has more invitations to speak than he can possibly take care of and explained that this is one of the awkward things about holding a job of this kind. At this point he told the story about George Bernard Shaw's sending to Winston Churchill two tickets to the opening night for one of his plays, along with a note reading, "for yourself and a friend—if you have one." Shaw received a reply from Churchill saying, "I am very sorry I have a previous engagement for this night but I would be glad to have two tickets for the second night—if there is one."

The Foundation

Dr. Waterman then explained that the initial aims were to get the active programs of the Foundation started and outlined for the future, and then to proceed a little further "in our efforts in research on manpower, which is very critical right now." He said that the Foundation began its work in April, 1951, under an Act of Congress adopted in May of 1950; that the National Science Board (similar to a Board of Directors) was appointed by President Truman in late November of the same year; and that their operations for 1951 were restricted to an administrative budget of \$225,000, which was half the amount originally recommended for use during the first year of operation. He added that "in 1952, because of the lateness at which the staff appeared on the scene, it was necessary to get ready in two months for hearings in June, so we just got in the Supplemental Appropriations Bill and did not receive our appropriation until November, 1951; our operations thus date from that time. For

1953 we have a \$3½-million operating budget; the act limits us to \$15 million."

National Science Board

Dr. Waterman referred to his mention of the National Science Board, which, he said, "is a 24-member board composed of persons from the fields of research, education, industry and public affairs from all over the country. On this board there are university presidents, deans and vice presidents, industrial heads, foundation heads, and straight scholars. Its membership is evenly distributed between the biological and medical sciences and the mathematical and physical sciences. Representation with respect to the sciences is very complete and this is an interested and interesting group; there have been meetings of the board nearly every month, with an average attendance of 20 out of the 24."

"In addition to determining policy matters, the Board approves grants for research and awards for fellowships; we of the operating staff keep them fully informed on all matters. On my own staff we have four divisions, viz., biological sciences; mathematical, physical and engineering sciences; medical research; and scientific personnel and education. Program-wise, biological and medical research are being treated together. The biological sciences program was started first, since the Department of Defense and the Atomic Energy Commission already gave considerable support to the physical sciences. We do well to take research in these pure sciences as our maiden effort. We are giving increasing attention to basic medical research, but we have no intention of dealing with clinical medicine."

Applied vs. Basic Research

"There are plenty of agencies in government that have special-interest needs. I have always said it is important for a government agency to support basic research in fields of direct importance to the agency's mission, but I believe a general comprehensive program of basic research is best supported by such an agency as the Foundation. As you all know, when one starts a research program with a definite applied end in view it often turns out that the direct attack fails to accomplish the result wanted, and the final answer may come out in some unexpected way in other fields. The history of research is full of that sort of thing. Applied research is apt to make steady progress, whereas fundamental research is more erratic and occasionally makes big jumps; sometimes these are revolutionary in nature. We plan to stand solidly for the fundamental type of research; it is a part of our charter that we have this kind of latitude. We hope in the future to keep in touch with other

agencies on the research they are doing so that we can have a grasp of their problems or bring to their attention things that come out of our own work."

"When one tries to justify fundamental research, it is hard to avoid the impression it is all rather vague. One of the best presentations is to treat a research program like an investment which, if well planned, will pay for itself statistically. We in the Foundation have a difficult problem in explaining what we are trying to do, and hope you appreciate the fact that we are ready to do what we can to help other agencies, especially in basic research problems."

The First Year

"In this first year we have concentrated on getting the organization working smoothly so that we know thoroughly our major operating procedures. I have learned the hard way that it does not pay to bite off more than one can chew. This year, the staff has been organized and two major programs established; our next steps will be to get in touch with other agencies such as yours to find out how we may be helpful in the general picture."

"I may say that we have already awarded 68 grants to 47 institutions in 29 states. Thirty more grants are to be processed soon. We are forming our program by selection from among the proposals that come in largely from research men and women at universities. The average grant is about \$6,000 per year and the average duration is two years. In order to hold red tape down, we are trying to keep the mechanics of the operation as simple as possible. All these grants are divided among the biological, medical, mathematical, physical and engineering sciences. This is one operating part of our program."

A National Policy

"The second step is a long job—one that requires a great deal of care; this is the development of a national policy for research. The best course is that recommended in the Hoover Commission Report:

"The major functions of such a Foundation (National Science Foundation) should be (a) to examine the total scientific research effort of the Nation, (b) to assess the proper role of the Federal Government in this effort, (c) to evaluate the division of research effort among the scientific disciplines and among fields of applied research, and (d) to evaluate the key factors that impede the development of an effective national research effort."

"This involves a knowledge of what the Government is doing in each area

and what is going on in science throughout the country. The simplest way to attain this end is to follow the leads of what scientists are doing in their own disciplines. It is important to talk to the research people, since they know the picture best and can readily provide this background. We also learn what different agencies are doing and the whole picture will eventually emerge.

Graduate Fellowships

"Our third function deals with scientific personnel and education. The major objective here was the establishment of a graduate fellowship program this year. Thus far 624 fellowships have been awarded—569 predoctoral and 55 postdoctoral. There is a great demand at this time for college graduates with simple bachelors' degrees and we of the Foundation want to see that those competent have opportunity to enter graduate school. Three thousand applications for these fellowships were received, covering every state in the Union, as well as Hawaii, Alaska and Puerto Rico. Awards are made on the basis of ability alone. Out of the 3,000 applications received, 1,000 of them were really good. There was money for only 624!

"Awards were made according to the following scientific categories—biological sciences, 158; chemistry, 140; physics, 137; engineering, 75; mathematics, 62; earth sciences, 36; agriculture, 7; astronomy, 6; anthropology, 2. Our program could not be announced until last November, and the awards had to be ready by April; we feel that next year by making our announcements earlier there will be even greater response.

Scientific Manpower

"Another matter in which we are interested is that of scientific manpower. We feel that close attention should be paid to this and that we should see what we can do about this subject. It would take, for example, a very large budget—certainly out of our reach—to increase teaching salaries in secondary schools. We are making surveys to find out more about this situation and the factors that caused it; then we will make studies to recommend what may be done. According to present enrollment figures in colleges and universities there will be in 1954 only about half as many students graduating in scientific fields as there were last year. Our fellowship program can help, but aid must go further than that. To get back to our secondary schools, a total of about 40,000 students will graduate from them this year, but only about a third of this number will probably be capable of going into science. At the present time, 42,000 are in our science and engineering schools; what we need is 100,000 students to go into these fields.

"Only about half the entering classes go through to their B.S. degrees. Of the top quarter of high school students, 40 per cent do not go to college. There may be many reasons for this, but the fact remains that only about two-thirds of those possessing the required I.Q. ratings do not go on to college. Statistically, it looks as though we are losing a lot of good prospects. Of course, I.Q.'s do not give the whole story, especially with regard to sci-

ence. One out of every five schools has no special provision for science, and half the schools have no facilities for teaching it. This is a very serious situation. We should see to it that a better job of teaching is done—especially in the secondary schools. More could be done by decentralized and informal methods of guidance and incentive. We could encourage colleges to stimulate interest among local secondary schools. We could devise a scheme for recognizing a teacher—some recognition that would appeal to him directly. One could give him opportunities to see something of research progress in his subject, or let him attend conferences that might freshen his teaching viewpoint. These are forms of recognition I believe would be effective.

"One of the best statements on the subject of secondary-school teachers comes from Dean Harrison of the Massachusetts Institute of Technology, which I will read to you:

'As to the secondary school teachers, it does not take an eagle eye to see that they are more to be pitied than censured. While the national income has tripled, expenditures for public education have remained practically static. While factory wages have gone up an average of 56 per cent, teachers' salaries have gone up 7 per cent. Since most of the extra earnings of the factory workers were made possible by increased output resulting from use of machines invented and designed by the scientists and engineers trained by the teachers, we have here a flourishing green vine that doesn't know yet that its roots are withering. Unfortunately, this problem is very difficult to attack because the income of the laborer is principally a matter of dynamic union control, while that of the teacher is a matter of static taxpayer control, with a negative feedback.'

Frontiers of Science

"The Foundation can do another thing to help. All research tends to be compartmentalized. During the last century we saw techniques transferred from one field to another with marvelous results. These techniques that go from one subject to another can be a great stimulus to research. I believe that some of the most interesting work in science is taking place along these lines today and that this approach is extremely important. We should pay attention to the continuous 'spectrum' of knowledge as well as the individual components. We hope in the Foundation to give special encouragement to research of this type.

"Finally, we should keep in mind the apt expression of Dr. Vannevar Bush in *Science—The Endless Frontier*, to the effect that applied research tends to drive out basic. We must keep up progress on the scientific frontier—that is to say, in basic or fundamental research. Without this we can only make less and less improvements in more and more fields. We should all work to see that a proper balance is maintained between basic and applied research. In the basic research field we can present a united front for progress in science."

Question Period

Question: "Apparently you are interpreting science as physical science; why not economic or social?"

Answer: Dr. Waterman explained that as they did not want to spread out too much at first they had decided not to go into the social science field during the first year, but that next year they plan to look into the other fields; he added that "We must survey what is going on in private research."

Question: "In connection with figures on the number of individuals with I.Q.'s sufficiently high to go into scientific fields, is there a breakdown on males and females?"

Answer: "There was, but I can't give the exact figures here. There are a few women graduates in engineering. With the present shortage of scientists it is very important to see that women also go into this field. Where they have done so they have done well and they should be given more encouragement."

A guest remarked from the floor that, in her work with those engaged in industry, she is always appalled by the fact that professional people sell their abilities as cheaply as they do; also that one has only to sit in with an industrial group for awhile to see how much they depend on the decisions of professional people.

Question: "What is the amount of the fellowships?"

Answer: "1,400 the first year, \$1,600 the second year, and \$1,700 to \$3,000 for the post-doctorate years."

Dr. Colvin Presents Report To Agriculture Staff

Members of OPEDA will be glad to know that the Report of the Committee on Working Criteria, which was published in the March 1952 issue of the Newsletter, was presented to the Secretary's Staff Meeting on August 14.

Dr. Carl Colvin, who was chairman of the committee during the preparation of the Report, described the nature of the committee's work, the method of securing a cross section of the OPEDA viewpoints, and discussed the main issues involved in each of the seven questions. Mr. T. L. Gaston, the new chairman of the committee, participated in the discussion, and Ralph Stauber introduced the report with a brief reference to Assistant Secretary Hutchinson's luncheon meeting talk to OPEDA on Administration, and subsequent conversations with Mr. Hutchinson's staff on the same subject. Members of the committee which prepared the report were invited to attend the Staff Meeting for this presentation.

The Secretary's staff gave close attention to the discussion and manifested gratifying interest in the report. Mr. Hutchinson also expressed appreciation for the presentation.

Rand Resigns

It is with a sense of deep regret and profound loss that OPEDA announces the resignation of Dr. Frederick V. Rand as Executive Officer. Dr. Rand submitted his resignation effective July 1, 1952, in order to enable him to

fulfill some personal obligations initially incurred before coming to OPEDA and which he found it impossible to fulfill while acting as Executive Officer.

Dr. Rand brought to the position of Executive Officer a rich background in scientific work in the fields of bacteriology and plant pathology. He brought also energy, initiative, persistence, and good judgment of a high order which stood OPEDA in good stead. He testified effectively before Congressional Committees on matters in which OPEDA was interested whenever it was appropriate, and was meticulous in performing all the other responsibilities of his office. Dr. Rand has also been generous in assisting OPEDA on various matters since formally leaving the office.

Our best wishes and highest regards go with Dr. Rand.—*B. R. Stauber, President.*

The Office Staff

OPEDA's extremely capable Financial Secretary, Mrs. Mildred Pullen, has resigned to take care of the perhaps more pressing needs of her new daughter, Pamela Ann! She has been with our organization since February 1950. Her contributions to its smooth running have been many and varied; we shall miss her sorely both for her effectiveness as a trained accountant and for her general dependability.

Mrs. Pullen's work has now been taken over by Miss Margaret Meehan, who has been employed in the Department of Agriculture over the past 20 years. We find that her excellent background and experience are standing her in good stead for looking after the membership and financial records.

In view of these changes in personnel, however, OPEDA is especially fortunate in that Mrs. Lila Meyer continues as Office General Secretary. Her 10 years as a congressional secretary and her thorough knowledge of OPEDA's background and operation will insure the maintenance of continuity in serving our membership.

Items

New Members: Thus far no inflation has hit OPEDA's dues! Help us to keep it so by bringing in new members, in this way benefiting both yourselves and your confreres. Here is one outstanding example: Mr. Roswell Carr of the Lansing, Mich. FHA office, recently brought in 17 new members; this is 100% of those eligible in his outfit.

Membership Eligibility: Article III of the last printing of OPEDA's Constitution states: "Personnel of the Department of Agriculture of General Schedule grade 5 and above are eligible for membership and may become members upon application and payment of dues." This is interpreted to include members of the Extension Service located in the States, among whom we have a considerable number of members. Moreover, let us refer again to the action by the Council at its May 26 meeting granting eligibility to membership of USDA employees in GS-4, *provided* they give bona fide evidence from one or more superior officers that they are employed on scientific or subprofessional work for the Department of Agriculture and show

real promise of becoming full professional employees.

Fellowships: The Second Graduate Fellowship Program of the National Science Foundation, providing awards for study during the 1953-54 academic year in the mathematical, physical, medical, biological and engineering sciences, will get under way early in October. Application forms for both predoctoral and postdoctoral graduate fellowships for the 1953-54 academic year may be obtained after October 1, 1952, from the National Science Foundation, Washington 25, D. C.

Thumbnail History of OPEDA

On *February 14, 1929*, at the suggestion of Dr. A. F. Woods, then Director of Scientific Work, Dr. K. F. Kellerman, Associate Chief of the Bureau of Plant Industry, addressed a memorandum to the heads of all Department of Agriculture bureaus asking them to designate representatives to participate in a meeting of general interest to all professional employees of the Department. The preliminary meeting was held the following day and the results were set forth in a memorandum which proposed that a more formal meeting be held on February 18. On this occasion, attended by 25 representatives of 18 bureaus and independent offices, the details of organization were developed and plans made for the selection and designation of representatives of each participating unit to appoint an executive committee or governing body for formulation of a constitution and creation of a permanent organization.

On May 10 a second formal meeting was held and Dr. A. F. Woods was duly elected as the first president of the new "Organization of Professional Employees of the U. S. Department of Agriculture."

During the formative stages of OPEDA one school of thought held that there was no need for such an organization; that its potential members could fully safeguard all employment rights and interests by membership in the then existing groups of Federal employees—notably NFFE. But the consensus was that full fruition of a career service in professional and scientific fields would demand adjustment of many problems and situations not of direct or dominant interest to the nonprofessionals who formed the great majority of members in the existing organizations. There was a strong feeling that only through an organization fully appreciative and expressive of their special needs, views, opinions and findings could the professional employees attain complete recognition and sympathetic understanding of all their problems and circumstances. No conflict of purpose or program was foreseen; on the contrary, individual membership in both types of organization was deemed to be quite consistent and actually desirable. (As a matter of fact, this dual membership is not uncommon at the present time.)

In an early memorandum proposing the initial meeting, one of the reasons given for OPEDA was:

"... immediate consideration should be given to ways and means for securing more comprehensive and satisfactory representation of professional and sci-

entific employees of the Department of Agriculture on matters needing expression of group opinion."

Certain more general circumstances also believed to necessitate and warrant a professional-employee organization were voiced in a circular issued in March, 1931:

"For many years members of the scientific and professional staff of the Department of Agriculture have felt the necessity of organizing for mutual benefit in matters requiring cooperative effort or group action. They have felt that there should be (1) full opportunity for the free discussion of the problems affecting the welfare of the professional employees, (2) a recognized and representative body of such employees ready to cooperate in an effective way with administrative officials and others in efforts to promote the efficiency of the personnel and the work of the Department, and (3) an organization of numerous membership extending to the Department's professional personnel in all parts of the country through which their voice could speak authoritatively and appropriately to congressional committees on matters affecting them.

"Some of the conditions underlying the need for such an organization have been the comparatively low salaries paid the highly trained scientific and technical staff and the resulting large annual turnover to industry and State institutions; the lack of a feeling of group solidarity and the consequent inability of the Department's professional membership to function effectively in matters requiring consensus of opinion; and the occasional introduction of congressional bills affecting the personnel and work of the Department concerning which group expression in an organized way would be helpful not only to the Department and its members but also the legislators considering such bills."

To persons qualified for membership in OPEDA, professional employment in the Federal service is not so much a means of life as a way of life. Its major satisfaction may be in terms of distinctive accomplishment, outstanding achievement in fields of science or management, a sense of individual contribution to the welfare of the nation equalling or exceeding the benefits individually derived from employment by the nation. There are responsibilities of joint participation in enterprises of great magnitude and vital national importance. There are obligations of professional competence, of leadership and of supervision.

Acute need exists for the correction of erroneous public attitudes towards the public service; need for eliminating the criticism, derision or disparagement so often and so unjustifiably expressed; need for convincing the general public that the government employee who is widely recognized by his co-workers, by his contemporaries in fields of management or science and by that part of the public with which he deals, as a person who possesses in large measure technical competence,

culture, integrity, probity, human sympathy, exceptional scientific ability and public spirit, is not divested of such qualities and attributes by the fact of employment in the Federal service; does not stifle or subvert such qualities in the performance of his professional or scientific functions for government.

Higher pay and shorter hours have never been the basic motivation or sustaining principle of OPEDA. The principle of fully adequate compensation has been stressed but as a means to meet the increasingly alluring competition of private enterprise and thus to attract and hold people of superior ability in professional and scientific fields. Hours of work have been regarded as more important in arrangement than in number. A motto or slogan: "Watch results, not the clock!" undoubtedly would be broadly expres-

sive of the viewpoint of the large majority of OPEDA's membership.

The duties and responsibilities of the average member of OPEDA can not be and are not clocked on and off in rigid conformity with prescribed time schedules. Constructive mental activity related to current problems of administration or research is quite apt to begin with the first or end with the last waking moment of the day. Need frequently exists for participation in or attendance at conferences during evening hours or on nonwork days. Hours of travel far beyond the prescribed working hours of the day or week are an unescapable occupational necessity. An employee organization in which hours of work and rates of pay were the transcendent considerations would leave unsatisfied many segments in the realm of professional employment.

These are facts of professional employment which are too frequently ignored or misrepresented; too seldom correctly pictured or emphasized. Recognition of these conditions is what brought OPEDA into being and has maintained it as a going concern throughout the years of its existence.

OPEDA has not been, is not, and will not be a pressure group motivated solely by selfish interests and purposes. Naturally, it is primarily concerned with the individual interests of its members, but it is also greatly concerned with the best interests of the Department, the bureaus and agencies comprising the Department, and the best general needs of the public. It is concerned not alone with pay for service but also with service for pay. It prefers to attain its objectives by the presentation of facts and reason and logic, based on sound technical knowledge, wide experience, and superior judgment, rather than through purely political appeals, noncooperation, or coercion.

There are three specific fields in which OPEDA can properly and effectively function: (a) Legislation, (b) Civil Service, (c) Administration.

In each of these fields OPEDA's function is to present and endeavor to obtain recognition of all factors which support beneficial proposals or which are against proposals that would adversely affect the interests of its membership.

The Council, Officers, Executive Committee and staff of OPEDA have endeavored to do their part in furthering the objectives and procedures set for them. They solicit further the active and augmented continuation of support by the full membership in carrying OPEDA through to positions of increasing usefulness to the Department and the public which we are all here to serve.

THE PRESIDENTS OF OPEDA

1929:	A. F. Woods, Director of Scientific Work
1930-31:	C. C. Clark, Weather Bureau
1932-33:	R. E. Marsh, Forest Service
1934:	E. W. Sheets, Bureau of Animal Industry
1935-37:	S. B. Fracker, Bureau of Entomology
1937:	E. W. Sheets
1938-40:	L. A. Jones, Soil Conservation Service
1941-44:	Samuel Goodacre, Soil Conservation Service
1944-45:	C. R. Ball, Extension Service
1946:	D. A. Spencer, Bureau of Animal Industry
1947-48:	M. C. Merrill, Office of Information
1949-50:	B. A. Porter, Bureau of Entomology
1951-52:	B. R. Stauber, Bureau of Agricultural Economics

APPLICATION BLANK

Organization of Professional Employees of the
U. S. Department of Agriculture
P. O. Box 381
Washington 4, D. C.

Date _____, 195__

Application hereby is made for membership in the Organization of Professional Employees of the United States Department of Agriculture, the annual dues of which are \$2.00 per year and for which there is no initiation or membership fee.

Name (First name in full: Mr., Mrs., Miss, Dr.) _____

Bureau _____

Address _____

Div. or Branch _____

Title _____

Classification: GS-_____

Enclosed is check (), currency (), money order () for \$2.00 for 195__ dues. (Checks or money orders may be made payable to Org. Prof. Employees USDA or simply to O.P.E.D.A.)

(Signature of Applicant) _____

Miss Louise O. Bercau
Library

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